-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *the amendment filed 28 September 2004*.

2. ☒ The allowed claim(s) is/are *1-15 and 17-19*.

3. ☒ The drawings filed on *07 December 2001* are accepted by the Examiner.

4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a) ☒ All   b) ☐ Some*   c) ☐ None   of the:

   1. ☒ Certified copies of the priority documents have been received.

   2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

   3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

   1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____ .

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)

6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

Henry N. Tran

HENRY N. TRAN
PRIMARY EXAMINER

EXAMINER'S AMENDMENT

1.   An examiner's amendment to the record appears below. Should the changes

and/or additions be unacceptable to applicant, an amendment may be filed as provided

by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be

submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview

with Ido Tuchman (Reg. # 45,924) on 28 October 2004 (interview summary attached).

The application has been amended as follows:

In the claims:

Claims 1 – 15 and 17 – 19 have been amended as indicated in the attached

supplemental amendment.

2.   The following is an examiner's statement of reasons for allowance:

None of the prior art alone or in combination teaches the limitations of claims 1,

5, 7, 10, 12, 13, or 15.

Regarding claim 1, none of the prior art teaches:

> An input system comprising: a pen input apparatus including: a plurality of
> penpoints; a selector for selecting a specific penpoint from said plurality of
> penpoints contained within the pen input apparatus; a ground detector configured
> to detect when the specific penpoint is in contact with a writing surface; a control
> circuit coupled to the ground detector, the control circuit configured to distinguish
> between each of the plurality of penpoints; and a transmitter for transmitting at
> least the track of said specific penpoint as position information to a computer
> system.

Regarding claim 7, none of the prior art teaches:

An electronic input apparatus comprising: a digitizer for grasping a track drawn by a penpoint selected in a writing instrument including a plurality of penpoints and allowing a predetermined penpoint to be selected from said plurality of penpoints contained within the digitizer, and recognizing the attribute of said penpoint; a ground detector configured to detect when the selected penpoint is in contact with a writing surface; a control circuit coupled to the ground detector, the control circuit configured to distinguish between each of the plurality of penpoints; and an interface for outputting the position information obtained from the track of said penpoint grasped by said digitizer, and attribute information on said recognized attribute.

Regarding claim 10, none of the prior art teaches:

A writing instrument for inputting to a digitizer, comprising: a plurality of penpoints for drawing images on a recording medium placed on said digitizer; a penpoint selector for selecting a specific penpoint from said plurality of penpoints contained within the writing instrument; a ground detector configured to detect when the specific penpoint is in contact with a writing surface; a control circuit coupled to the ground detector, the control circuit configured to distinguish between each of the plurality of penpoints; and an electromagnetic wave outputting unit for generating, to said digitizer, an electromagnetic wave of a different frequency for each penpoint selected by said penpoint selector.

Regarding claim 12, none of the prior art teaches:

A digitizer comprising: a pen including a plurality of penpoints contained within the pen and a control circuit configured to distinguish between each the plurality of penpoints; a track recognition unit for recognizing the track of a pen manipulated by the user, the pen including a plurality of penpoints; a ground detector configured to detect when a selected penpoint is in contact with a writing surface; a pen information recognition unit for recognizing the information on the type of said penpoint selected according to the information obtained from said pen; and an output unit for generating position information from the track recognized by said track recognition unit, and adding the information on the type of said penpoint recognized by said pen information recognition unit to the generated position information and outputting them.

Regarding claim 13, none of the prior art teaches:

A method for inputting coordinates comprising the steps of: changing, at a pen, an output frequency of a frequency generator based on a selected penpoint from

a plurality of penpoints contained within the pen; detecting when the selected penpoint is in contact with a writing surface; receiving position information of the pen based on the track drawn by the user on recording medium placed on a coordinate input apparatus, and receiving attribute information on the type of a line used for the track drawn from the coordinate input apparatus; and reflecting said received attribute information on said received position information to electronically record image information corresponding to the track drawn by the user on said recording medium.

Regarding claim 15, none of the prior art teaches:

A method for transmitting coordinate information from a coordinate input apparatus to a computer system, comprising the steps of: changing, at a pen, an output frequency of a frequency generator based on a selected penpoint from a plurality of penpoints contained within the pen; detecting when the selected penpoint is in contact with a writing surface; expressing the position information, based on a track drawn by the user with said coordinate input apparatus, in X- and Y- coordinates; adding attribute information on the type of the line giving said track to said position information expressed by said X- and Y- coordinates, thereby to form a block: and transmitting the formed block in a predetermined unit.

More specifically, in each of the above listed claims none of the prior art teaches a digitizer pen with a selection means for selecting from a plurality of penpoints contained within the pen and a ground detecting element associated with the selected penpoint that detects when the selected penpoint is in contact with a writing surface as illustrated in Fig. 3 of the instant application.

The closest prior art to the claimed invention are US Patent 5,737,740 to Henderson et al., US Patent 6,067,080 to Holtzman, and US Patent 5,599,122 to Yu.

Holtzman teaches a pen input apparatus comprising a pen input apparatus (column 4, lines 40 – 45), a type recognition unit (column 4, lines 55 – 60), and a

transmitter (column 4, lines 60 – 65). Although Holtzman suggests the use of alternate marking devices (column 4, lines 55 – 60) and a switch that sends a signal to a sensor array when the pen tip is in contact with the writing surface (column 7, lines 27 – 45), Holtzman does not teach a digitizer pen with a selection of a plurality of penpoints contained within the pen nor does it teach a ground detection element that determines when the selected penpoint from the plurality of penpoint is in contact with the writing surface.

Henderson teaches an x-y digitizer where the hardcopy of a document is placed thereon and is written upon with a digitizer that marks the original document while the same time converting the handwritten marking into digital form. Henderson teaches using multiple digitizer pens and even pens that have removable inking and non-inking inserts (column 5, lines 44 – 61), but does not teach one pen with multiple penpoints contained therein.

Yu (figs. 1 & 2) does teach a pen with multiple penpoints (11) and a selector (13), but shows no electrical means within the pen and is directed towards a conventional inking pen.

None of the above references alone or in combination teach the claimed invention.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

3.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following US Patents have been included be made of record due to similar content relating to digitizer pens:

US Patent 5,736,980 to Iguchi et al.

US Patent 5,565,632 to Ogawa

US Patent 5,832,113 to Sano

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Prizio whose telephone number is (703) 305-5712. The examiner can normally be reached on Monday-Friday (7:30-5:00), alternating Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe can be reached on (703) 305-4709. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Peter Prizio
Examiner
Art Unit 2674

Prizio
October 29 2004
PP

Henry N. Tran

HENRY N. TRAN
PRIMARY EXAMINER